



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1950
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,499	06/30/2003	Mihai Sirbu	TI-35627	8638

23494 7590 02/16/2007
TEXAS INSTRUMENTS INCORPORATED
P O BOX 655474, M/S 3999
DALLAS, TX 75265

EXAMINER

URICK, MATTHEW T

ART UNIT	PAPER NUMBER
----------	--------------

2113

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
.3 MONTHS	02/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/608,499	SIRBU, MIHAI	
	Examiner	Art Unit	
	Matt Urick	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152..

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2113

Final Rejection

Status of the Claims

Claim 11 is objected to due to minor informalities

Claims 1-19 are rejected under 35 USC 103

Claim Objections

Claim 11 is objected to because of the following informalities: Claim 11 contains the limitation: "wherein the test unit is connected said test unit to a testing system..."

This limitation appears to more appropriately be: "wherein the test unit is connected said test unit to a testing system..." Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8, and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mongan (United States Patent No. 6,304,982 B1) in view of Microsoft Computer Dictionary (fifth edition).

As per claim 1, Mongan discloses:

Art Unit: 2113

A computer method for testing a test unit, comprising:

Connecting said test unit to a testing system in a laboratory environment, wherein the test unit is off-line from the normal installation of the test unit (column 3 lines 47-51: column 4 lines 51-54: test script is executed by the computer, taking it off-line from its normal installation. Column 1 lines 25-27: the system is for testing before release to end-users. Figure 1 is interpreted as the laboratory environment.)

receiving an output of said test unit into said testing system (column 7 lines 41-43, lines 48-50: server receives output of client), wherein the testing system performs a [real-time] exchange of one of time-critical (column 7 lines 41-43, lines 48-50, a timeout exists for data retrieval) and state-critical (column 4 lines 16-24: tests are state dependant) messages and data representing [real-time] inputs and outputs to and from the test unit for a protocol as if the unit is on line in its normal installation (column 1 lines 27-40: test scripts exist which execute commands as if the test unit is in normal operation);

providing an expert system operably connected to said testing system (column 3 lines 36-45: test grouper 122 connected to server);

comparing, in said expert system, said output with an expected result for said protocol at each one of said time-sensitive and state sensitive inputs and outputs (column 8 lines 50-60: test grouper receives test 110 (the input) and error messages generated (the outputs). There is no indication that any of this information is omitted); and

determining, in said testing system, if said output complies with said expected result (column 8 lines 1-5).

Mongan does not disclose:

...the test system performs a real-time exchange.....representing real-time inputs and outputs....

Microsoft Computer Dictionary discloses "real-time" as being an operating mode which the machine's activities match the human perception of activity. Real-time operations occur at the same rate as an external process, and are useful in situations where a computer must respond to situations as they occur. Mongan discloses that time constraints are a concern in his system (column 1 lines 40-50). Using a real-time system would prevent any delays in the testing system, reducing overhead and producing immediate results. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate real-time operations into the testing system of Mongan, reducing overhead and increasing speed.

As per claim 2, Mongan discloses:

The method of claim 1, further comprising:

analyzing the output for fact data in said expert system (column 8 lines 50-56);

analyzing the output for rule data in said expert system (column 8 lines 57-60);

and

evaluating relationships of the facts and the rules within said output across multiple input and output data units exchanged between the test system and the test unit to determine compliance of said output with said protocol at each one of said time-sensitive and state sensitive inputs for the expected protocol output rule data and fact data resulting from the inputs (column 8 lines 50-64: the test grouper can receive multiple error messages, and use test 110 to determine the result).

As per claim 3, Mongan discloses:

The method of claim 1, wherein said test unit comprises a software code (column 4 lines 16-25).

As per claim 4, Mongan discloses:

The method of claim 1, further comprising:

entering an input into said test unit from said testing system (column 6 lines 56-62 server program inputs test 100 to client); and

comparing said output with said expected result according to said input (column 6 lines 63-65 testing system checks results).

As per claim 5, Mongan discloses:

The method of claim 1, further comprising:

entering an input into said test unit from said testing system (column 6 lines 56-62 server program inputs test 100 to client); and

comparing said output with an anticipated response of said test unit according to said input (column 6 lines 63-65 testing system checks results).

As per claim 6, Mongan discloses

The method of claim 1, further comprising:

receiving a second output of a second test unit into said testing system (column 3 lines 34-37, column 4 lines 25-29: multiple client computers are depicted, and it is disclosed that multiple clients can perform the described method);

comparing, in said expert system, said second output with a second expected result for said second output (column 8 lines 50-60); and

determining, in said testing system, if said second output complies with said second expected result (column 8 lines 1-5).

As per claim 8, Mongan discloses

The method of claim 6, further comprising:

entering an input into said second test unit (column 6 lines 56-62 server program inputs test 100 to client); and

comparing said second output with said second expected result according to said input (column 6 lines 63-65 testing system checks results).

As per claim 11, Mongan discloses

A system for testing a test unit, comprising: a processor, comprising:
a testing module for receiving an output of said test unit(column 7 lines 41-43, lines 48-50: server receives output of client), wherein the test unit is connected to a testing system in a laboratory environment, wherein the test unit is off-line from the normal installation of the test unit (column 3 lines 47-51: column 4 lines 51-54: test script is executed by the computer, taking it off-line from its normal installation. Column 1 lines 25-27: the system is for testing before release to end-users. Figure 1 is interpreted as the laboratory environment.); and

wherein the testing system performs a [real-time] exchange of one of time-critical (column 7 lines 41-43, lines 48-50, a timeout exists for data retrieval) and state-critical (column 4 lines 16-24: tests are state dependant) messages and data representing [real-time] inputs and outputs to and from the test unit for a protocol as if the unit is on line in its normal installation (column 1 lines 27-40: test scripts exist which execute commands as if the test unit is in normal operation);

an expert system for comparing said output with an expected result for said output and for determining if said output complies with said expected result for said protocol at each one of said time-sensitive and state sensitive inputs and outputs (column 3 lines 36-45: test grouper 122 connected to server; column 8 lines 50-60: test grouper receives test 110 (the input) and error messages generated (the outputs)).
There is no indication that any of this information is omitted)

Mongan does not disclose:

Art Unit: 2113

...the test system performs a real-time exchange.....representing real-time inputs and outputs....

Microsoft Computer Dictionary discloses "real-time" as being an operating mode which the machine's activities match the human perception of activity. Real-time operations occur at the same rate as an external process, and are useful in situations where a computer must respond to situations as they occur. Mongan discloses that time constraints are a concern in his system (column 1 lines 40-50). Using a real-time system would prevent any delays in the testing system, reducing overhead and producing immediate results. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate real-time operations into the testing system of Mongan, reducing overhead and increasing speed.

As per claim 12, Mongan discloses

The system of claim 11, wherein said expert system analyzes said test unit output for a fact data, analyzes the said test unit output for a protocol rule data, evaluates relationships of said fact data and said rule data between a plurality of outputs of said test unit across multiple input and output data units exchanged between the test system and the test unit, and determines whether said output complies with said protocol at each one of said time-sensitive and state sensitive inputs and outputs (column 8 lines 50-64: the test grouper can receive multiple error messages, and use test 110 to determine the result).

Art Unit: 2113

As per claim 13, Mongan discloses

The system of claim 11, wherein said test unit comprises a software code (column 4 lines 16-25).

As per claim 14, Mongan discloses

The system of claim 11, further comprising:

a control module for entering an input into said test unit (column 6 lines 56-62 server program inputs test 100 to client); and

wherein said expert system compares said output with said expected result according to said input (column 6 lines 63-65 testing system checks results).

As per claim 15, Mongan discloses

The system of claim 11, further comprising: a control module for entering an input into said test unit (column 6 lines 56-62 server program inputs test 100 to client); and,

wherein said expert system compares said output with an anticipated response of said test unit according to said input (column 6 lines 63-65 testing system checks results).

As per claim 16, Mongan discloses

The system of claim 11, further comprising: a second test unit operably connected to said testing system,

wherein said testing system receives a second output of said second test unit (column 3 lines 34-37, column 4 lines 25-29: multiple client computers are depicted, and it is disclosed that multiple clients can perform the described method); and

wherein said expert system compares said second output with a second expected result for said second output and determines if said second output complies with said second expected result (column 8 lines 50-60).

Claims 7, 9, 10, and 17-19 rejected under 35 U.S.C. 103(a) as being unpatentable over Mongan (United States Patent No. 6,304,982 B1) in view of Microsoft Computer Dictionary (fifth edition), as applied above, and in further view of Asher (United States Patent Application Publication No. 2004/0034614 A1).

As per claim 7, Mongan discloses:

The method of claim 6, further comprising:

providing a communication link between said test unit and said second test unit, wherein said second test unit is connected said test unit in the laboratory environment, wherein the second test unit is off-line from the normal installation of the second test unit (column 3 lines 23-32 and figure 1: multiple clients may be installed and connected over a network; column 1 lines 25-27: the system is for testing before release to end-users. Figure 1 is interpreted as the laboratory environment.);

capturing a [real-time] exchange of one of time-critical and state-critical messages and the data representing [real-time] inputs and outputs to and from the first

Art Unit: 2113

test unit and the second test unit for the protocol as if the second test unit is on-line in its normal installation; and

Mongan does not disclose:

capturing a communication data transferred between said test unit and said second test unit, and

analyzing, in a protocol analyzer, outputs from said second test unit for compliance with the [real-time] protocol exchange between the first test unit and the second test unit.

Asher discloses a system which two computers are connected through a Local Area Network (§ 39 lines 1-4), and a network incident analyzer monitors the data being sent through them (§ 20 last 7 lines). Asher discloses that this system enables a user to compile troubleshooting data gathered from multiple systems (§ 4, § 5). Mongan discloses that multiple computers may be used in his invention (column 3 lines 23-32 and figure 1), and that he wishes to compile a list of tests and results at a central location (column 1 line 66 – column 2 line 4). Using the network incident analyzer of Asher would enable the system to test network connections and retain the results at a central location. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the network incident analyzer of Asher into the testing system of Mongan, to provide added troubleshooting capabilities while retaining the results at a central location.

Mongan and Asher do not disclose:

capturing a **real-time** exchange of one of time-critical and state-critical messages and the data representing **real-time** inputs and outputs,

analyzing...the **real-time** protocol exchange between the first test unit and the second test unit (*emphasis added*).

Microsoft Computer Dictionary discloses "real-time" as being an operating mode which the machine's activities match the human perception of activity. Real-time operations occur at the same rate as an external process, and are useful in situations where a computer must respond to situations as they occur. Mongan discloses that time constraints are a concern in his system (column 1 lines 40-50), as does Asher (¶ 8 - ¶ 9). Using a real-time system would prevent any delays in the testing system, reducing overhead and producing immediate results. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate real-time operations into the testing systems of Mongan and Asher, reducing overhead and increasing speed.

As per claim 9, Mongan fails to disclose:

The method of claim 1, further comprising: providing a user interface module in said testing system that provides an external input and external output for the testing system (column 3 lines 23-32 client 102 may be a personal computer).

Asher discloses a system in which a GUI is used to display data received and compiled by a network incident analyzer (¶ 24). Asher discloses that this enables the user to understand and interpret mass amounts of data coming from a troubleshooting

system (§ 7, § 8). Mongan discloses that he desires to keep and make accessible a database of test results (column 3 lines 36-45). Using the GUI of Asher would provide the user with a summary of applicable information, improving the capabilities of a user to interpret the results. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the GUI of Asher into the testing system of Mongan, to provide added troubleshooting capabilities.

As per claim 10, Mongan fails to disclose:

The method of claim 1, further comprising: providing a computer interface module in said testing system that provides an external input and external output for the testing system.

Asher discloses a system in which a GUI is used to display data received and compiled by a network incident analyzer (§ 24). Asher discloses that this enables the user to understand and interpret mass amounts of data coming from a troubleshooting system (§ 7, § 8). Mongan discloses that he desires to keep and make accessible a database of test results (column 3 lines 36-45). Using the GUI of Asher would provide the user with a summary of applicable information, improving the capabilities of a user to interpret the results. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the GUI of Asher into the testing system of Mongan, to provide added troubleshooting capabilities.

As per claim 17, Mongan discloses:

Art Unit: 2113

The method of claim 16, further comprising:

a communication link between said test unit and said second test unit wherein said second test unit is connected said test unit in the laboratory environment, wherein the second test unit is off-line from the normal installation of the second test unit (column 3 lines 23-32 and figure 1: multiple clients may be installed and connected over a network; column 1 lines 25-27: the system is for testing before release to end-users. Figure 1 is interpreted as the laboratory environment.); and

a protocol analyzer, operably connected to said testing system, wherein said testing system captures a [real-time] exchange of one of time-critical and state-critical messages and the data representing [real-time] inputs and outputs to and from the first test unit and the second test unit for the protocol as if the second test unit is on-line in its normal installation;

Mongan does not disclose:

capturing a communication data transferred between said test unit and said second test unit, and

wherein said protocol analyzer analyzes outputs from said second test unit for compliance with the [real-time] protocol exchange between the first test unit and the second test unit.

Asher discloses a system which two computers are connected through a Local Area Network (§ 39 lines 1-4), and a network incident analyzer monitors the data being sent through them (§ 20 last 7 lines). Asher discloses that this system enables a user to

Art Unit: 2113

compile troubleshooting data gathered from multiple systems (§ 4, § 5). Mongan discloses that multiple computers may be used in his invention (column 3 lines 23-32 and figure 1), and that he wishes to compile a list of tests and results at a central location (column 1 line 66 – column 2 line 4). Using the network incident analyzer of Asher would enable the system to test network connections and retain the results at a central location. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the network incident analyzer of Asher into the testing system of Mongan, to provide added troubleshooting capabilities while retaining the results at a central location.

Mongan and Asher do not disclose:

said testing system captures a **real-time** exchange of one of time-critical and state-critical messages and the data representing **real-time** inputs and outputs,

said protocol analyzer analyzes...the **real-time** protocol exchange between the first test unit and the second test unit (*emphasis added*).

Microsoft Computer Dictionary discloses “real-time” as being an operating mode which the machine's activities match the human perception of activity. Real-time operations occur at the same rate as an external process, and are useful in situations where a computer must respond to situations as they occur. Mongan discloses that time constraints are a concern in his system (column 1 lines 40-50), as does Asher (§ 8 - § 9). Using a real-time system would prevent any delays in the testing system, reducing overhead and producing immediate results. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate real-time operations

into the testing systems of Mongan and Asher, reducing overhead and increasing speed.

As per claim 18, Mongan discloses

The system of claim 11, further comprising: a user interface module in said testing system for providing an external input and output into said testing system.

Asher discloses a system in which a GUI is used to display data received and compiled by a network incident analyzer (§ 24). Asher discloses that this enables the user to understand and interpret mass amounts of data coming from a troubleshooting system (§ 7, § 8). Mongan also stresses the problems associated with receiving multiple results from multiple systems. Using the GUI of Asher would provide the user with a summary of applicable information, improving the abilities of the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the GUI of Asher into the testing system of Mongan, to provide added troubleshooting capabilities.

As per claim 19, Mongan discloses

The system of claim 11, further comprising: a computer interface module in said testing system for providing an external input and output into said testing system.

Asher discloses a system in which a GUI is used to display data received and compiled by a network incident analyzer (§ 24). Asher discloses that this enables the user to understand and interpret mass amounts of data coming from a troubleshooting

Art Unit: 2113

system (§ 7, § 8). Mongan also stresses the problems associated with receiving multiple results from multiple systems. Using the GUI of Asher would provide the user with a summary of applicable information, improving the abilities of the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the GUI of Asher into the testing system of Mongan, to provide added troubleshooting capabilities.

Conclusion

Because there were no amendments made since applicant's final rejection, the same grounds of rejection and art of record have been maintained. All claims are drawn to the same invention claimed in the earlier amendment and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier amendment. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2113


the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matt Urick whose telephone number is (571) 272-0805. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VR


ROBERT BEAUSOLIEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100